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CITY and COUNTY of BRISTOL

PORT HEALTH AUTHORITY.



Annual Report of the Medical Officer of Health  
for the year 1946.

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### Dock Sanitation.

Factories and workplaces have been kept in good repair and a cleanly condition. The managements concerned have readily complied with informal requests to make good all defects found during inspection.

Canteens, including adjoining washplaces and sanitary accommodation, have been maintained with satisfactory standards of cleanliness.

Obsolete public conveniences at the Bristol Docks were replaced by five modern type conveniences during the year. The Port of Bristol have now provided up-to-date, hygeinic sanitary accommodation in all of the dock areas, and attendants are employed to cleanse these conveniences daily. Frequent inspections have shown that they are maintained in the desired manner.

Refuse collection is carried out by the City Cleansing Department. Waste food from ships and from dock premises, ships' domestic refuse, quayside trade refuse and a considerable quantity of ship trade refuse is collected daily. This work has been done very efficiently, and without delay, even when large quantities of refuse needed removal from the dock to the points of dispersal. The use of Bank Farm and Rockingham sites for tipping was discontinued in mid-October, and all tip surfaces were suitably covered over when tipping was completed. All dock refuse is now taken to the West Town (River Bank) tip.

Good use has been made by ships of the concrete refuse bays on the quayside. Complaints, due to the collection of refuse on ships' decks, no longer occur.

During September many dock workers sustained insect bites, which caused a good deal of pain and discomfort, and necessitated medical attention in some cases. These workers were employed at the timber yard. A careful search of this site, and of adjoining waste ground, revealed that the culicine mosquito "Theobaldia Annulata", present in considerable numbers, was the cause of this trouble. This specie of insect, often referred to as the "wood gnat", breeds on the surface of stagnant water particularly in the vicinity of decaying timber. It is most active during the fall of the year, particularly after a wet summer. The Port of Bristol Authority were informed of the matter and measures of control were recommended. Immediate attention was given by the Departments concerned, and all breeding areas were eliminated.





### Miscellany.

#### Parrots (Prohibition of Import) Regulations - 1930.

Five vessels arrived in 1946 with seventeen birds of the parrot specie on board. Importation was prohibited under the regulations.

#### Medical inspection of Aliens.

During the year 166 Aliens arrived at the Port and were medically inspected, 30 of these being subjected to a detailed examination. One Alien, found to be suffering from an acute infectious disease, was landed and transferred for observation and treatment to the infectious diseases hospital.



Vessels entering the Port during the year.

At the Bristol City docks the number of Foreign-going arrivals has increased, chiefly due to the resumption of the Baltic Trade. This has been countered by a reduction - chiefly in respect of Oil Tankers - in the number of Foreign-Going arrivals at the Avonmouth docks.

During the year 565 Foreign-Going merchant vessels entered the Port. All were inspected on arrival, and subjected to the established precautionary measures during their stay. A large number of these vessels arrived from infected areas. Forty-four were from plague infected ports.

The port medical officers dealt with 22,710 crew and passengers, of whom 772 were referred to clinic, hospital or to Federation Doctor for treatment or observation. No dangerous infection was dealt with, but this in no way lessens the need for careful inspection and surveillance - both of which are essential preliminaries to the rapid and satisfactory control of ship-borne disease.





1.- Amount of Shipping entering the Port during the year - 1946

(AVONMOUTH, PORTISHEAD and BRISTOL DOCKS)

Table A.

	Number *	Tonnage *	Number inspected		Number reported to be defective	Number of vessels on which defects were remedied	Number of vessels on which defects were found and re- ported to Ministry of Transport surveyors	Number of vessels reported as having, or having had, during the voyage infectious disease on board
			By the Medical Officer of Health	By the Sanitary Inspector				
FOREIGN	575	1,864,526	427 138	427 138	178 41	166 41	3 1	12 4
Total Foreign								
	8,228	1,066,693	-	433 228 - -	64 4 - -	58 4 - -	1 - - -	4 - - -
Total Coastwise								
Total Foreign and Coastwise								

+ Includes mechanically propelled vessels other than steamers.  
 \* Figures supplied by Port Authority. The foreign tonnage includes vessels entering from a coastwise port to load for a foreign port.  
 \*\* Excluding vessels having venereal disease on board.



# II.-Character of Trade of Port

Table B.

(a) Passenger Traffic during the year - 1946

No. of passengers	1st Class	2nd Class	3rd Class	Transmigrants	Totals
Inwards					
Aliens	150	-	-	-	150
British	1,426	-	-	-	1,426
Outwards					
Aliens	104	-	-	-	104
British	1,189	-	-	-	1,189

The foreign ports from which passengers principally arrived were :-

Kingston (Jamaica), Basra(Iraq), Montreal & Halifax (Canada),  
 Norfolk & New York (U.S.A.), Buenos Aires (Argentina), Auckland (N.Z.),  
 Melbourne (Australia), also North & West African Ports.





## (b) Cargo Traffic.

## PRINCIPAL IMPORTS - 1946

COMMODITIES			TONS
Grain	Tons	-	451,673
Oilseeds	"	-	13,517
Feeding Stuffs	"	-	9,096
Cereal products for human consumption	"	-	44,428
Fruit:			
Bananas	Bunches	1,295,930	16,318
Oranges & Lemons	Cases	413,050	20,519
Other Green Fruit	Tons		9,481
Canned	"		7,080
Dried	"		10,636
Metals and Ores :			
Brass	"		87
Copper	"		13,310
Iron	"		8,419
Lead	"		6,718
Spelter	"		2,811
Zinc Concentrates	"		116,553
Paper	"		18,581
Petroleum	"		1,211,204
Provisions :			
Bacon	"		20,900
Butter	"		22,711
Cheese	"		28,606
Lard	"		4,264
Frozen Meat	"		68,049
Sugar :			
Refined	"		-
Unrefined	"		10,216
Glucose	"		27
Molasses	"		10,051
Tobacco	"		55,889
Wine	Pipes	3,445	2,067
	Dozens	1,680	42
Spirits	Pipes	385	231
	Dozens	18,150	363
Wood and Timber	Tons		98,559
Woodpulp	"		59,938
All Other Goods	"		328,856
Total Foreign Imports.			2,671,200

## PRINCIPAL EXPORTS - 1946

Commodities	Tons
Chemicals :	
Salt Cake	6,050
Other Kinds	3,024
Clay	2,176
Coke	-
Earths	1,012
Iron	19,400
Paper	369
Strontia	2,287
All other goods	112,402
Total Foreign Exports	146,720



(c) Foreign Ports from which vessels arrive.

EUROPE :

North -

Amsterdam, Antwerp, Burea, Delfzyl, Gdynia, Gefle, Ghent, Gothenburg, Granville, Hamburg, Helsingfors, Hernosand, Kaleningrad, Karlmar, Karlochan, Karlsborg, Kotka, Lubeck, Oskarshamn, Oslo, Pitea, Rotterdam, Stettin, Stockholm, Sundsvall, Terneuzen, Trondheim, Vifstavarv.

South -

Barcelona, Bordeaux, Brest, Cadiz, Cartagena, Catania, Cherbourg, Genoa, Gibraltar, Le Harve, Lisbon, Marseilles, Malta, Nantes, Naples, Oporto, Piraeus, Rouen, Santander, Seville, Spezia, Tounay Charente, Trieste, Valencia.

AFRICA -

Accra, Alexandria, Algiers, Bathurst, Beira, Casablanca, Capetown, Dakar, Durban, Freetown, Lagos, Mombassa, Oran, Port Elizabeth, Port Said, Port Sudan, Sfax, Sierra Leone, Suez, Takoradi, Tiko, Winneba, - ISLANDS - Cape Verde, Cannary, and Mauritius.

ASIA -

Abadan, Basra, Bombay, Bahrein, Bangkok, Calcutta, Chittagong, Cochin, Haifa, Izmir, Jaffa, Karachi, Madras, Marmagao, Ormuz, Penang, Port Swettenham, Rangoon, Saigon, Singapore, Shanghai, Vizagapatam,

AMERICA :

NORTH

Canada-

Fort Churchill, Halifax, Montreal, Parrsboro, Quebec, Sorel, Sydney-C.B., St. John-N.B., Three Rivers, Vancouver.

Newfoundland-

Botwood, St. John's, Wabana.

U.S.A.-

Baltimore, Baton Rouge, Baytown, Boston, Charleston, Corpus Christi, Galveston, Houston, Mobile, New York, Newport News, Norfolk, Norco, New Orleans, Philadelphia, Portland Maine, Portland Oregon, Port Arthur, San Francisco, San Pedro, Savannah, Sabine, Texas City, Wilmington.

CENTRAL -

Antigua, Aruba, Barbados, Carapito, Cuba, Curacao, Demerara, Kingston, Maracaibo, Panama, St. Kitts, Trinidad.

SOUTH -

Bahia Blanca, Buenos Aires, La Plata, Montevideo, Patagonia, Punta Arenas, Rio de Janeiro, Rosario, Santos.

AUSTRALIA -

Adelaide, Albany, Brisbane, Cairns, Freemantle, Geelong, Melbourne, Newcastle, Port Pirie, Rockhampton, Sydney.

NEW ZEALAND -

Auckland, Bluff, Christchurch, Dunedin, Napier, New Plymouth, Wellington.





# MEDICAL INSPECTION OF ALIENS

Annual return by the Medical Inspector of Aliens for the year ended 31st December, 1946

	TOTAL	Number Inspected by the Medical Inspector	Number subjected to detailed examina- tion by the Medical Inspector	Certificates issued						Trans- migrants
				Lunatic idiot or M.D.	Undesir- able for medical reasons	Physically incapa- citated	Suffering from acute infectious disease	Landing necessary for adequate medical examina- tion		
(a) Total number of Aliens landing at the Port ...	150	150	30	-	-	-	1	1	-	
(b) Aliens refused permission to land by Immi- gration Officer	16	16	-	-	-	-	-	-	-	
(c) Transmigrants	-	-	-	-	-	-	-	-	-	
Total Aliens arriving at the Port ...	166	166	30	-	-	-	1	1	-	

Total number of vessels carrying Alien passengers... 57  
 Number of Vessels dealt with by the Medical Inspector ... 57



### III.-Water Supply.

#### (1) Source of supply for :-

##### (a) The Port.

Water, supplied by the Bristol Waterworks Company, is available to all premises in the dock area.

##### (b) Shipping.

Fresh water mains, carrying the Bristol Waterworks supply, are laid on to the quayside berths.

#### (2) Hydrants and hosepipes. What precautions are taken against contamination ?

Standpipes and hoses, used to convey water from the quayside mains to ships, are regularly flushed out and cleansed. Water is allowed to run free for a few minutes before being delivered to the ship's tanks. Samples are periodically submitted for chemical and bacteriological analysis.

#### (3) Number of water boats and their sanitary condition.

Only one water boat is available and this is used at the City Docks. The Port Health Inspector periodically examines this boat, and supervises when cleansing and cement washing become necessary.





#### IV.-Port Health Regulations, 1933 and 1945.

##### (1) Arrangements for dealing with Declarations of Health.

Under a local arrangement with the Pilotage Board, Declaration of Health forms are handed to the Master by the Channel Pilot in the Barry Roads. In most cases, these forms are completed for delivery to the Health Inspector boarding the vessels on arrival.

##### (2) Boarding of vessels on arrival.

All vessels, coastwise or from Foreign, are boarded at the locks on arrival by the health inspector on tidal watch. All vessels from Foreign, and all vessels reporting sickness which arrive from Foreign via a coastal port are boarded by the medical officer. "Infected" or "Suspected" ships are boarded by the medical officer and health inspector at Walton Bay from a tug chartered for this purpose.

##### (3) Notification to the Authority of inward vessels requiring special attention (wireless messages, land signal stations, information from pilots, Customs Officers, etc.).

Wireless messages are relayed to "Porthelth", Bristol, if there is any circumstance on board requiring the attention of the medical officer, giving the name of the ship and the expected time of arrival. These messages are forwarded from the Central Health Clinic to the port medical officer and the senior port inspector for appropriate action.

Visual signals for transmission to the port medical officer may also be directed to the land signal station at Walton Bay. In addition, masters of foreign-going ships approaching the port are required to hoist whichever of the quarantine signals is appropriate as set out in the 1931 International Code of Signals for visual signals.

##### (4) Mooring stations, designated under Article 10.

###### (a) Inner mooring stations.

Avonmouth	-	(a) Royal Edward Dock - North Wall.
	-	(b) Old Dock - Dolphin Buoy.
Bristol	-	Railway Wharf.
Portishead	-	No.1 Shed.

###### (b) Outer mooring station.

Avonmouth, Bristol and Portishead Docks - Walton Bay.



(5) Particulars of any standing exemptions from the provisions of Article 14.

There are no standing exemptions at this port for the reasons indicated in section (2) above.

(6) Experience of working of Article 16.

Unauthorised boarding, at one time particularly troublesome, is now reduced to a minimum in this port, the port medical officer and the health inspector being both in attendance at the time of arrival of all vessels referred to in Article 16.

Boarding for reasons of urgency may be permitted by the medical officer under such conditions as are imposed by him, but in no case may an individual so authorised leave a vessel until it is free from control under the Regulations.

It is sometimes impossible, on the other hand, to prevent sailors from "jumping ship" when passing through the locks or on arrival at berth, and in the cases which occurred at this port - all of which caused considerable delay in clearance and berthing - warnings were issued to the masters concerned.

In general, very few steps are taken by ships' masters to secure compliance with the provisions of Article 16 (i).

(7) What, if any, arrangements have been made for :-

(a) Premises and waiting rooms for medical examination.

All reported cases of sickness among crew and passengers are examined on board at the time of arrival. Crew and passenger inspections are completed on board shortly after reaching berth. Adequate accommodation, if a detailed examination is required for any other purpose under the Regulation, is available in the medical inspection room of the new Port Health Office, constructed in 1943.

(b) Cleansing and disinfection of ships, persons and clothing and other articles.

The cleansing and disinfection of infected ships quarters is carried out under the supervision of the inspectorial staff whenever necessary using the appropriate disinfectant. Clothing, bedding and other articles are removed by van and treated by steam under pressure at the City disinfecting station. The cleansing of persons is provided for at the City cleansing station. A 'typhus scheme' is in operation, whereby delousing of patients or contacts may be carried out by trained and protected teams using D.D.T. powder blowers.





- (c) Premises for the temporary accommodation of persons for whom such accommodation is required for the purposes of the Regulations, and
- (d) Hospital accommodation available for Plague, Cholera, Yellow Fever, Smallpox and other infectious diseases.

Patients suffering from infectious disease, and all cases requiring observation are removed to the City Isolation Hospital at Ham Green.

- (e) Ambulance transport.

This is provided for by ambulances belonging to the Health Committee.

- (f) Supervision of contacts.

Inspectors make daily visits to all vessels from infected or suspected ports and secure a signed report on the health of crew from the officer-in-charge. Any sickness developing after arrival is thus brought immediately to the notice of the medical officer. When surveillance is required, forward notices, giving the appropriate information, are posted to the Medical Officers of Health of the districts to which contacts proceed after leaving the ship.

- (8) Arrangements for the bacteriological or pathological examination of rats for plague, and
- (9) Arrangements for other bacteriological or pathological examinations.

All pathological and bacteriological examinations are conducted at the Preventive Medicine Laboratories at Canynge Hall. Rats from vessels and quays are systematically examined for evidence of plague. Water samples from hydrants or ships' tanks, and articles of food are examined chemically and bacteriologically when the occasion demands.

- (10) Arrangements for the treatment of the venereal diseases.

Full information concerning the location and hours of opening of the venereal disease centres at Avonmouth docks and at Bristol is given to the crew of every vessel entering the port. This information is contained in handbills, available in several languages, which are freely distributed to each ship. When indicated in-patient treatment, under the direction of the venereal diseases consultant, is available at the Snowden Road Hospital.





Extensive propaganda is carried out at this port, and here it may be recorded that in the attitude of merchant seamen generally to these diseases an improvement is discernable. One effect of this is a desire for the compressed hospital treatment of syphilis - a form of treatment which is to be encouraged as it affords a maximum chance of cure. (Perusal of V44 Transfer Books show that gross irregularity in treatment, sometimes inseparable from working conditions, too often occurs amongst seamen). Another indication of this attitude is the rise in the number of cases recorded as non-venereal at the Docks Centre during the year, a substantially increased proportion of these cases having attended for precautionary tests after exposure abroad.

The following table relates to seamen treated at the Avonmouth Centre during the years' 1944, 1945 and 1946. Since this centre was established in 1943 the four or five-fold increase in the number of seamen seeking treatment from Avonmouth docks has been maintained. (The figures for Bristol and Portishead docks are included in those for the Guardian House Clinic).

Year.	Syphilis.	Soft Sore.	Gonorrhoea.	Non-V.D.	Totals.
1944	154	19	159	311	643
1945	85	26	150	261	522
1946	67	27	254	291	639

(11) Arrangements for the interment of the dead.

Deaths occurring during a voyage, or in port, are fully investigated by the medical officer, and, when infectious disease has been excluded, arrangements for the transference of dead to the city mortuary, and subsequent interment, are made by the ships' agents.

(12) Other matters, if any, requiring attention.

There are no other matters arising out of the Regulations which require attention.





Table C.

## Cases of Infectious Sickness landed\* from Vessels

Disease	No. of cases during 1946		No. of Vessels concerned	Average No. of cases for previous 5 years
	Passen- gers	Crew		
Infectious diseases, including :				
Malaria ... ..	-	5	4	12.4
Diphtheria ... ..	-	1	1	0.8
Influenza ... ..	-	13	10	3.6
Pneumonia ... ..	1	-	1	4.2
Venereal disease ... ..	-	559	254	298.4

## Other diseases not included in Table C above landed\* from vessels

Disease	No. of cases during 1946		No. of Vessels concerned	Average No. of cases for previous 5 years
	Passen- gers	Crew		
Rheumatism... ..	-	2	2	3.2
Diseases of nervous system ...	-	7	7	16.8
" " circulatory system	-	5	5	6.2
" " respiratory system	1	8	8	8.0
" " digestive system	1	35	31	28.4
" " genito urinary system	-	4	4	3.6
" " skin and cellular tissue	-	49	34	21.2
" " bones and organs	-	4	3	7.2
locomotion	-	46	38	23.6
Traumatism	-	9	8	9.0
Ill-defined diseases	-			

\* Includes only cases requiring medical attention, but all were not removed from ships to hospital.



Table D.

Cases of Infectious Sickness occurring on Vessels during the voyage but disposed of prior to arrival

Disease	No. of cases during 1946		No. of Vessels concerned	Average No. of cases for previous 5 years
	Passengers	Crew		
Infectious diseases, including :				
Measles	2	-	1	3.6
Malaria	2	8	3	5.6
Venereal Disease	-	6	4	2.8

Other diseases not included in Table D above occurring on Vessels during the voyage but disposed of prior to arrival

Disease	No. of cases during 1946		No. of Vessels concerned	Average No. of cases for previous 5 years
	Passengers	Crew		
Diseases of digestive system	-	1	1	1.4
" " skin and cellular tissue	-	3	3	0.2
Traumatism	-	1	1	1.0
Ill-defined diseases	-	2	2	2.0





## V.-Measures against rodents.

### (1) Steps taken for detection of rodent plague.

#### (a) In ships in the port.

Measures commence with the arrival of each ship from 'Foreign', when consideration is given to the Bills' of Health, the Deratisation Certificate and the Declaration of Health signed by the master. The undisturbed surface of the cargo is examined prior to the commencement of discharge, and provides valuable evidence of the condition of the vessel with regard to rats. A thorough examination for signs of rat activity is continued during the time the cargo is being discharged.

In 96% of the vessels so examined during 1946 the rat population was estimated at less than 10. In 4% of the ships, 10 or more rats were destroyed by trapping and/or fumigation. In 6 ships, rat infestation was pronounced: the figures being 98, 132, 92, 101, 132 and 272 respectively. Four of these six ships possessed valid certificates - two of these valid certificates having been issued only three months previously. In each instance the owners were advised that deratisation was necessary on completion of discharge, and our requests were complied with.

When a valid deratisation or deratisation exemption certificate is produced, on a heavily infested vessel, no suitable legislation exists whereby Port Authorities can compel the owner to carry out disinfection. Articles 19 & 20 of the Regulations are not applicable, and the provisions of the Rats and Mice Destruction Act cannot be effectively applied to ships in port. There is a pressing need for the standardization of measures for the detection and repression of rats from port to port.

During the year 121 ships with invalid certificates were dealt with, 92 receiving Exemption certificates, and 15 Deratisation certificates following fumigation. Guarantee forms were accepted from 14 vessels wishing to apply for certificates at the final port of discharge in the United Kingdom, and in respect of these the appropriate forward notices were sent to the Port Health Authority concerned.

A total of 1,121 rats were recovered by fumigation and trapping during the year. Approximately 52%, or 587 of these were examined at the Department of Preventive Medicine and were found to be free from B. Pestis infection.

#### (b) On quays, wharves etc.,

Satisfactory rat repression has been maintained throughout 1946.

Permanent rat operators are employed to deal with rat activity on quays, wharves, warehouses, and ground in the vicinity. A total of 2,637 rats were destroyed, and of these, 2,388, or approximately 90% were caught at Avonmouth docks. This number, showing a 30% decrease on the 1945 figures, is indicative of improved conditions in the dock area. A progressive reduction in the annual figure is anticipated.



A detailed survey of the whole dock area was carried out in the third quarter of the year and an all round improvement was noted, with diminishing signs of rat activity in the well known focal points of infestation.

From the dock area 828, or 30%, of the total rats caught were sent to the Department of Preventive Medicine for examination. No B. Pestis were recovered from the rats examined.

(2) Measures to prevent the passage of rats between ships and shore.

(i) All vessels from infected or suspected ports are required to attach efficient rat guards to the mooring ropes.

(ii) Suitable lengths of tarred hessian are wrapped around moorings, outside the leads.

(iii) Gangways are well lighted at night and when possible are kept raised from the quay.

(3) Methods of deratisation. (a) On ships.

Fumigation with hydrogen cyanide gas is always recommended. Only one ship was fumigated with sulphur dioxide during 1946.

(b) Premises within the vicinity of docks or quays.

Frequent pre-baiting, poisoning and trapping is carried out in all premises where rat activity is discovered.

(4) Measures taken for the detection of rat prevalence in ships and on shore.

As outlined in (1) (a) above, routine inspection is made for signs of rat activity on the undisturbed surface of cargoes prior to discharge. Follow up inspection, including sprinkled sand tests, are subsequently carried out. On shore, regular inspection of all premises and waste ground are made, particular attention being given to premises where foodstuffs are stored.

(5) Rat-proofing.

(a) To what extent are docks, wharves, warehouses, &c., rat proof ?

The majority of docks, wharves, warehouses and private establishments within the dock area are of efficient rat proof construction.

(b) Action taken to extend rat-proofing.

(i) in ships.

When rat-proofing could effectively be carried out without extensive structural alterations, the owners were recommended to do this work. In many ships, rat-proofing was found to be particularly necessary in respect of provision storerooms. In each case, the recommendations were complied with.

(ii) on shore.

All buildings constructed in the dock area during the year were made effectively rat-proof. Similar attention was given whenever structural alterations were made to existing buildings.





Rats destroyed during the year - 1946

Table E. (1) On Vessels.

[illegible]



Rats destroyed during the year - 1946

Table F. (2) In Docks, Quays, Wharves and Warehouses.

[illegible]





Table G.

Measures of Rat Destruction on Plague "infected" or "suspected" Vessels or Vessels from plague infected ports arriving in the Port during the year - 1946

Total number of such Vessels arriving	Number of such Vessels fumigated by SO <sub>2</sub>	Number of Rats killed	Number of such Vessels fumigated by HCN.	Number of Rats killed	Number of such Vessels on which trapping, poisoning, &c., were employed	Number of Rats killed	Number of such Vessels on which measures of Rat destruction were not carried out
1.	2.	3.	4.	5.	6.	7.	8.
44**	-	-	-	-	20	184	24*

\*\* Forward Notices with regard to 4 ships were sent to other United Kingdom Ports, where vessels proceeded to complete discharge of cargo. Fumigations were subsequently arranged at these ports.

\* These ships were all examined for rat indications, but no measures were taken, either because there was no evidence of rats, or because of very short stay in port.



Table H  
Deratisation Certificates and Deratisation Exemption Certificates issued during the year - 1946

Net Tonnage	No. of Ships	No. of Deratisation Certificates Issued					No. of Deratisation Exemption Certificates Issued.	Total Certificates Issued
		After fumigation with				Total.		
		H.C.N. and Sulphur			After Trapping, Poisoning, etc.			
		H.C.N.	Sulphur	H.C.N. and Sulphur				
1.	2.	3.	4.	5.	6.	7.	8.	9.
Ships up to 300 tons	2	-	-	-	-	-	2	2
" from 301 tons to 1,000	20	1	-	-	-	1	19	20
" "1,001 " " 3,000	19	2	-	-	-	2	17	19
" "3,001 " " 10,000	66	11	1	-	-	12	54	66
" over 10,000 tons	-	-	-	-	-	-	-	-
Totals	107	14	1	-	-	15	92	107





### Hygiene of Crews' Spaces

During the year 2,281 visits and revisits were made to foreign going vessels, and 1,471 to coastwise vessels.

The figures for dirt and vermin are, as usual, the highest, particularly amongst British owned ships. This is regrettable. It would be reasonable, having regard to the constructional improvements and alterations that have been made, to expect a corresponding improvement in cleanliness and hygiene.

Whilst support should be given to all measures adopted to improve the standards of crew accommodation - and in many cases these are long overdue - it must be brought to the notice of seamen that they have important obligations to fulfil if these standards are to be maintained and bettered. They must realize that they, chiefly, are responsible for maintaining their accommodation in a clean condition. The prevailing indifference, which amounts in some instances almost to neglect, must be replaced by a sense of responsibility. In their own interests the men should aim to prove that they are worthy of improved conditions, for, if they do, their just claims will be more readily met by the shipowners.

Cockroach infestation is very much on the increase, and has claimed a great deal of the inspectors' attention. Most of the ships dealt with during the year were so infested. Insecticides containing D.D.T. have not produced satisfactory results, but Garmexane smoke generators, which became available towards the end of the year give effective promise of control, if not complete eradication, of these pests in ships.

Very few ships are now found to have bug infested quarters. The erection of vermin proof partitions, and the substitution of metal fittings for wood are important contributory factors in this respect.

Frequent contact was made throughout the year with the local senior surveyor of the Ministry of Transport on matters concerning structural defects in crew accommodation.



VI. Hygiene of Crews' Spaces

Table J. - Classification of Nuisances

Nationality of vessel	Number inspected during the year	Defects of original construction	Structural defects through wear and tear	Dirt, vermin and other conditions prejudicial to health
British     ...	974	46	163	713
Other Nations..	252	11	7	55
Totals        ...	1,226	57	170	768





### Food Inspection.

Compared with the year 1945, there has been a decrease in the amount of certain prepared foodstuffs, particularly frozen meat, discharged at the port. Other food commodities show a favourable tonnage comparison, and, with the resumption of banana shipments, there has been an increase in the amount of fresh fruits arriving during the year.

Attention has been given to methods of handling food cargoes during discharge ; measures for preventing contamination in the holds, on the quaysides and in the vehicles having been brought into effect by Stevedores and by the Port of Bristol Authority.

Most food shipments were in a sound condition upon discharge, and condemnation figures are therefore correspondingly low.

The world shortage of food supplies is not overlooked when the reconditioning of food is being supervised. In one instance it was necessary to detain 7,725 carcasses of mutton, lamb and pork, of which approximately 53% were affected as the result of a latent defect in the ships' refrigerator system. By careful and continuous supervision during the process of reconditioning it was possible to save 72% for use for human consumption.

In one particular mark of a consignment of canned tomatoes a high percentage of tins showed Hydrogen Swell. A 100% examination was carried out and all of the affected tins were rejected.

With the permission of the Ministry of Food and the helpful co-operation of Messrs. Elders and Fyffes' representative it was arranged early in 1946 that the Health Department should collect for distribution to the children in Bristol hospitals all bananas picked out as being in too advanced a state of ripeness for dispatch to depots and shops. From eleven shipments, 168 containers of bananas were thus distributed, and were received as suitable and very welcome gifts.

Resort to legal proceedings was not necessary during the year.

Imported foods continue to be consigned to the Ministry of Food and, as in previous years, close contact has been maintained with the various commodity officers.

## THE HISTORY

of the people of the United States, from the first settlement of the country to the present time, is a subject of great interest and importance. It is a subject which has attracted the attention of many of our best writers, and which has been the subject of many valuable works. The history of the United States is a history of a people who have been the most successful in the world, and who have been the most generous in their treatment of the native Americans.

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## VII.-Food Inspection.

Sampling under the Public Health(Preservatives, &c., in Food)Regulations 1925 to 1940., was not carried out during 1946, as the various Commodity Officers of the Ministry of Food take routine samples for this purpose.

### Quantity of Food Imported and dealt with :-

#### Fresh, frozen or canned meat, etc.

##### Frozen Beef:

Bone-less	190,195	Qrs.
Bone-in	119,793	"
Cuts	132,327	Bags & Pkgs.
" Mutton & Lamb	1,830,242	Carcases
" Mutton:		
Bone-less	4,335	"
Cuts	8,671	Packages.
" Pork :		
Bone-less	112,272	Sides.
Bone-in	57,894	"
Cuts	46,004	Packages
" Veal	8,238	Bags.
" Sundries	74,851	Packages.
" Poultry	11,213	Boxes.
" Rabbits	34,225	"
Bacon & Hams.	20,900	Tons
Canned Meat	21,552	"
Canned Fish	3,594	"

#### Fresh, dried and canned fruit, etc.

Bananas	16,318	"
Oranges & Lemons	20,519	"
Other Green Fruit	9,481	"
Canned Fruit	7,080	"
Dried Fruit	10,636	"
Vegetables - raw		
Onions	114	"
Tomatoes	74	"
Vegetables Canned	1,223	"
" In brine	210	"
Other Foods :		
Butter, Cheese and Lard	55,581	"
Grain	451,673	"
Cereal products for human consumption	44,428	"
Feeding stuffs for animals	9,096	"
Sugar :		
Unrefined	10,216	"
Glucose	27	"
Molasses	10,051	"

#### Imported Animals dead or slaughtered :-

Animals landed dead	Nil.
Slaughtered in lairs	Nil.

I have found my reference book in the library

and I am now in a position to write my report

on the subject of the new machine

and

the results of my experiments

are as follows: The new machine

is much more efficient than the old one

and it is also much cheaper

to operate. I have also found

that it is much more reliable

than the old one and it is

much more suitable for use in the laboratory

Unsound food destroyed or otherwise dealt with so as not  
to be used for human food.

Fresh or frozen meat, etc.		Tons.	Cwts.	Qrs.	lbs.
Beef		2	9	3	25
Mutton & Lamb		16	9	2	4
Pork		7	3	1	6
Offal		-	-	1	19
Bacon		-	4	1	10
Skinned Rabbits		-	2	1	12
Canned Goods.		Tins.			
Apples	3	-	-	-	18
Apricots	61	-	1	2	1
Beef (Corned)	500	-	17	1	7 $\frac{1}{2}$
Frankfurt & Tomato Sauce	18	-	-	-	18
Fruit Salad	33	-	-	1	5
Lime Juice	297	-	3	2	16
Mackerel	113	-	1	0	1
Milk (Evaporated)	8368	3	7	3	27
Mutton (Corned)	137	-	2	1	19
Ox Tongue	1	-	-	-	6
Peaches	706	-	12	3	18
Pears	295	-	4	3	21
Pilchards	112	-	1	-	-
Pork Sausages	47	-	-	1	19
Pork Sausage Meat	33	-	-	1	5
Puddings	8	-	-	-	8
Salmon	346	-	1	2	5 $\frac{1}{2}$
Tomatoes	59	-	1	0	21
Tomato :					
Juice	49	-	-	1	25
Paste	152	-	3	0	14
Pulp	26	-	-	2	2
Puree	2	-	-	-	12
	11,366				
Fruit & Vegetables.					
Apples		-	4	1	14
Apricots (Dried)		-	-	3	19
Currants		-	-	-	6
Peaches (Dried)		-	-	3	16
Potatoes		15	-	-	-
Prunes		-	1	1	13
Raisins		-	11	-	19
Seville Oranges		4	-	-	17
Sultanas		-	7	-	27
Other Goods.					
Candy Sweets		-	9	2	16
Eggs (Dried)		-	-	-	22
Malt		2	10	-	-
Oatmeal		-	3	1	10
Red Currant Pulp		-	3	-	-
Rolled Oats		-	2	3	18
Skimmed Milk Powder		-	1	3	4
Wheat		2	15	3	11
		59	3	3	25





- (2) Public Health (Cleansing of Shellfish) Act 1932.  
Public Health (Shellfish) Regulations 1934.

There are no shellfish beds or layings within the jurisdiction of the Bristol Port Health Authority. The supply of shellfish marketed in Bristol is obtained mainly from the following sources :

Cockles from St. Clair, South Wales, and King's Lynn, Norfolk.  
Escallops " Brixham, South Devon.  
Mussels " Appledore, North Devon; and St. Clair, South Wales.  
Oysters " Cornwall, others from Thames Estuary and Continental Countries via London.  
Winkles " Appledore, North Devon.  
Whelks " King's Lynn, Norfolk.

- (3) Samples of Food examined by Bacteriologist and Analyst.

ARTICLE.	EXAMINED FOR.	RESULT.
Brisket Beef, canned	Soundness	Unfit for food.
Corned " "	"	Genuine.
Cheese.	"	Some deterioration, but fit for food.
Flour.	H.C.N. contamination	No contamination.
Milk, homogenized	Soundness	Genuine.
Tomatoes, canned	"	Tin content above limit.

